

## CLAIMS

1. (Canceled)
2. (Previously presented) The channel selection method of claim 8 wherein said frequency of performing said channel quality measurements is a function of the relative position of said mobile station with respect to a first base station serving said mobile station.
3. (Previously presented) A method of channel selection for a mobile station comprising:
  - determining a position of said mobile station;
  - periodically performing channel quality measurements of signals transmitted from one or more base stations, wherein the frequency of performing said channel quality measurements is based on said position of said mobile station independent of the speed of said mobile station; and
  - wherein said frequency of performing said channel quality measurements is a function of the relative position of said mobile station with respect to a first base station serving said mobile station and at least one additional base station.
4. (Previously presented) The channel selection method of claim 3 wherein the position of said at least one additional base station is transmitted to said mobile station by said first base station.
5. (Previously presented) The channel selection method of claim 4 wherein the position of said at least one additional base station is included in a neighbor list transmitted to said mobile station by said first base station.
- 6-7. (Canceled)

8. (Previously presented) A method of channel selection for a mobile station comprising:
- determining a position of said mobile station;
  - periodically performing channel quality measurements of signals transmitted from one or more base stations, wherein the frequency of performing said channel quality measurements is a function of said position of said mobile station; and
  - wherein said frequency of performing said channel quality measurements is a function of the length of time said mobile station remains in said position.
9. (Previously presented) The channel selection method of claim 8 wherein said channel quality measurements are performed by said mobile station while said mobile station is in an idle mode.
10. (Previously presented) The channel selection method of claim 3 wherein said channel quality measurements are performed by said mobile station while said mobile station is engaged in a packet switched call.
11. (Previously presented) The channel selection method of claim 3 wherein said channel quality measurements are performed by said mobile station while said mobile station is engaged in a circuit switched call.
12. (Previously presented) The channel selection method of claim 3 wherein said mobile station uses said channel quality measurement for cell reselection.
13. (Previously presented) The channel selection method of claim 3 further including transmitting said channel quality measurements from said mobile station to a first base station serving said mobile station.
14. (Original) The channel selection method of claim 13 further including making hand-off determinations at said first base station based on said channel quality measurements.

15 -20. (Canceled)

21. (Currently amended) A method of determining the position of a mobile station comprising:

~~The method of claim 20~~

determining a position of said mobile station at a first time instant;

updating said position periodically, wherein a frequency of said updating is a function of said position of said mobile station;

wherein said frequency of updating said position is a function of the mobility of said mobile station; and

wherein said frequency of updating said position is a function of the rate of change of said position of said mobile station.

22. (Currently amended) A method of determining the position of a mobile station comprising:

~~The method of claim 20~~

determining a position of said mobile station at a first time instant;

updating said position periodically, wherein a frequency of said updating is a function of said position of said mobile station;

wherein said frequency of updating said position is a function of the mobility of said mobile station; and

wherein said frequency of updating said position is a function of the length of time said mobile station remains in said position.

23-31. (Canceled)

32. (Previously presented) The mobile station of claim 36 wherein said control logic varies the frequency of performing said channel quality measurements based on the relative position of said mobile station with respect to a first base station serving said mobile station.

33. (Previously presented) A mobile station comprising:

a transceiver to transmit and receive radio frequency signals;  
a signal processor operatively connected to said transceiver to periodically perform channel quality measurements on selected signals received by said transceiver;  
control logic to control said signal processor and said transceiver to vary the frequency of performing said channel quality measurements based on the position of said mobile station independent of the speed of said mobile station; and  
wherein said control logic varies the frequency of performing said channel quality measurements based on the relative position of said mobile station with respect to a first base station serving said mobile station and at least one additional base station.

34-35. (Canceled)

36. (Previously presented) A mobile station comprising:

a transceiver to transmit and receive radio frequency signals;  
a signal processor operatively connected to said transceiver to periodically perform channel quality measurements on selected signals received by said transceiver;  
control logic to control said signal processor and said transceiver to vary the frequency of performing said channel quality measurements as a function of the position of said mobile station; and  
wherein said control logic varies the frequency of performing said channel quality measurements based on the length of time said mobile station remains in said position.

37. (Previously presented) The mobile station of claim 33 further including a positioning receiver to determine the position of said mobile station.

38-42. (Canceled)

43. (Currently amended) A mobile station comprising: ~~The mobile station of claim 38~~

a transceiver transmitting and receiving radio frequency signals;

a positioning receiver periodically determining a position of said mobile station;

control logic controlling said transceiver and said positioning receiver, wherein said control

logic varies the frequency of determining said position of said mobile station as a

function of said position; and

wherein said control logic varies the frequency of determining said position of said mobile station based on the length of time said mobile station remains in said position.

44. (Canceled)

45. (Previously presented) The control method of claim 49 wherein said frequency of performing said periodic task is a function of the relative position of said mobile station with respect to a first base station serving said mobile station.

46. (Previously presented) A method of controlling a mobile station comprising:

determining a position of said mobile station;

performing a periodic task, wherein the frequency of performing said task is based on said

position of said mobile station independent of the speed of said mobile station; and

wherein said frequency of performing said periodic task is a function of the relative position

of said mobile station with respect to a first base station serving said mobile station and

at least one additional base station.

47-48. (Canceled)

49. (Previously presented) A method of controlling a mobile station comprising:
- determining a position of said mobile station;
  - performing a periodic task, wherein the frequency of performing said task is a function of  
said position of said mobile station; and
  - wherein said frequency of performing said periodic task is a function of the length of time  
said mobile station remains in said position.